

**IN THE ABSTRACT:**

Delete the current abstract and substitute the following.

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Functional assays that use hT1R2 receptor polypeptides to screen for taste modulatory compounds are provided. In preferred embodiments these assays will use cells that stably or transiently express an hT1R2 polypeptide and which further express a suitable protein, e.g. G<sub>α15</sub>, G<sub>α16</sub> or gustducin. Such functional assays will screen for the effect of compound on T1R2 activity by detecting changes in cell voltage, intracellular ions, phosphorylation, second messenger levels and the like. Compounds identified in such assays are potentially useful as taste modulators. In preferred embodiments, the effect of selected compounds is evaluated further in human taste tests.